COOPERATIVE PATENT CLASSIFICATION

PHYSICS (NOTES omitted)

INSTRUMENTS

PHOTOGRAPHY; CINEMATOGRAPHY; ANALOGOUS TECHNIQUES USING WAVES OTHER THAN OPTICAL WAVES; ELECTROGRAPHY; HOLOGRAPHY (NOTE omitted)

ELECTROGRAPHY; ELECTROPHOTOGRAPHY; MAGNETOGRAPHY (information storage based on relative movement between record carrier and transducer G11B; static stores with means for writing-in or reading-out information G11C; recording of television signals H04N 5/76)

NOTES
1. This subclass covers:
   • the production of permanent directly-visible pictures in conformity with an original picture or document, using an intermediate imagewise distribution of an electric or magnetic quantity, such as a charge pattern, an electric conductivity pattern, or a magnetic pattern;
   • the production of permanent directly-visible pictures using an intermediate imagewise distribution of an electric or magnetic quantity, when the origin and the way of generating said intermediate distribution are not relevant.
2. This subclass does not cover:
   • use of electric signals for the transmission of the picture information from the original to the reproduction, i.e. pictorial communication, which is covered by subclass H04N;
   • production of pictures by heat patterns exclusively, not using an electrostatic or magnetic pattern, which is covered by group B41M 5/00;
   • production of prints by transferring ink from a printing form to a printing surface, without physical contact and using the force of an electrostatic field, which is covered by subclass B41M;
   • selective printing mechanisms characterised by the selective supply of electric current, or the selective application of magnetism or radiation, to a printing material or impression-transfer material, which are covered by groups B41J 2/385, B41J 2/435.

WARNING

In this subclass non-limiting references (in the sense of paragraph 39 of the Guide to the IPC) may still be displayed in the scheme.

5/00 Recording members for original recording by exposure, e.g. to light, to heat, to electrons; Manufacture thereof; Selection of materials therefor (recording surfaces for measuring apparatus G01D 15/34; photosensitive materials for photographic purposes G03C)
   5/005 . . [Materials for treating the recording members, e.g. for cleaning, reactivating, polishing]
   5/02 . . Charge-receiving layers (G03G 5/153 takes precedence)
         5/0202 . . . [Dielectric layers for electrography]
         5/0205 . . . [Macromolecular components]
         5/0208 . . . . . [obtained by reactions only involving carbon-to-carbon unsaturated bonds]
         5/0211 . . . . . [obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds]
   5/0214 . . . . [Organic non-macromolecular components]
   5/0217 . . . [Inorganic components]
   5/022 . . Layers for surface-deformation imaging, e.g. frost imaging
   5/024 . . Photoelectret layers

5/026 . . Layers in which during the irradiation a chemical reaction occurs whereby electrically conductive patterns are formed in the layers, e.g. for chemixerography
   5/028 . . Layers in which after being exposed to heat patterns electrically conductive patterns are formed in the layers, e.g. for thermoxerography
   5/04 . . Photoconductive layers; Charge-generation layers or charge-transporting layers; Additives therefor; Binders therefor
   5/043 . . . Photoconductive layers characterised by having two or more layers or characterised by their composite structure
         5/0433 . . . . . [all layers being inorganic]
         5/0436 . . . . . [combining organic and inorganic layers]
         5/047 . . . . . . . characterised by the charge-generation layers or charge transport layers ([G03G 5/0433 and G03G 5/0436 take precedence])
   5/05 . . . Organic bonding materials; Methods for coating a substrate with a photoconductive layer; Inert supplements for use in photoconductive layers
5/0503 . . . . . . [Inert supplements]
5/0507 . . . . . . [Inorganic compounds]
5/051 . . . . . . [Organic non-macromolecular compounds]
5/0514 . . . . . . [not comprising cyclic groups]
5/0517 . . . . . . [comprising one or more cyclic groups consisting of carbon-atoms only]
5/0521 . . . . . . [comprising one or more heterocyclic groups]
5/0525 . . . . . . [Coating methods]
5/0528 . . . . . . [Macromolecular bonding materials]

**NOTE**

In groups G03G 5/0528 - G03G 5/0596, in the absence of an indication to the contrary, a polymer is classified in the last appropriate place

5/0532 . . . . . . {obtained by reactions only involving carbon-to-carbon unsatured bonds}
5/0535 . . . . . . {Polyolefins; Polystyrenes; Waxes}
5/0539 . . . . . . {Halogenated polymers}
5/0542 . . . . . . {Polyvinylalcohol, polyallylalcohol; Derivatives thereof, e.g. polyvinylesters, polyvinylethers, polyvinylamines}
5/0546 . . . . . . {Polymers comprising at least one carboxyl radical, e.g. polyacrylic acid, polycrotonic acid, polymaleic acid; Derivatives thereof, e.g. their esters, salts, anhydrides, nitriles, amides}
5/055 . . . . . . {Polymers containing hetero rings in in the side chain}
5/0553 . . . . . . {Polymers derived from conjugated double bonds containing monomers, e.g. polybutadiene; Rubbers}
5/0557 . . . . . . {obtained otherwise than by reactions only involving carbon-to-carbon unsatured bonds}
5/056 . . . . . . {Polysters}
5/0564 . . . . . . {Polycarbonates}
5/0567 . . . . . . {Other polycondensates comprising oxygen atoms in the main chain; Phenol resins}
5/0571 . . . . . . {Polyamides; Polyimides}
5/0575 . . . . . . {Other polycondensates comprising nitrogen atoms with or without oxygen atoms in the main chain}
5/0578 . . . . . . {Polycondensates comprising silicon atoms in the main chain}
5/0582 . . . . . . {Polycondensates comprising sulfur atoms in the main chain}
5/0585 . . . . . . {Cellulose and derivatives}
5/0589 . . . . . . {Macromolecular compounds characterised by specific side-chain substituents or end groups}
5/0592 . . . . . . {Macromolecular compounds characterised by their structure or by their chemical properties, e.g. block polymers, reticulated polymers, molecular weight, acidity}
5/0596 . . . . . . {Macromolecular compounds characterised by their physical properties}
5/06 . . . . . . . . characterised by the photoconductive material being organic

**NOTE**

In groups G03G 5/06 - G03G 5/0698, in the absence of an indication to the contrary, an invention is classified in the last appropriate place

5/0601 . . . . . . [Acyclic or carboxyclic compounds]
5/0603 . . . . . . [containing halogens]
5/0605 . . . . . . [Carboxyclic compounds]
5/0607 . . . . . . [containing at least one non-six-membered ring]
5/0609 . . . . . . [containing oxygen]
5/0611 . . . . . . [Squaric acid]
5/0612 . . . . . . [containing nitrogen]
5/0614 . . . . . . [Amines]

**WARNING**

Group G03G 5/0614 is impacted by reclassification into groups G03G 5/06142 - G03G 5/06149.
All groups listed in this Warning should be considered in order to perform a complete search.

5/06142 . . . . . . [arylamine]

**WARNING**

Groups G03G 5/06142 - G03G 5/061473 are incomplete pending reclassification of documents from group G03G 5/0614.
Groups G03G 5/0614 and G03G 5/06142 - G03G 5/061473 should be considered in order to perform a complete search.

5/06144 . . . . . . [diamine]
5/06143 . . . . . . [benzidine]
5/06146 . . . . . . [terphenyl-diamine]
5/06145 . . . . . . [trimine or greater]
5/06147 . . . . . . [alkenylarylamine]
5/06143 . . . . . . [plural alkenyl groups linked directly to the same aryl group]
5/06149 . . . . . . [enamine]

**WARNING**

Group G03G 5/06149 is incomplete pending reclassification of documents from group G03G 5/0614.
Groups G03G 5/0614 and G03G 5/06149 should be considered in order to perform a complete search.

5/0616 . . . . . . [Hydrazines; Hydrazones]
5/0618 . . . . . . [containing oxygen and nitrogen]
5/062 . . . . . . [containing non-metal elements other than hydrogen, halogen, oxygen or nitrogen]
5/0622 . . . . . . [Heterocyclic compounds]
5/0624 . . . . . . [containing one hetero ring]
5/0625 . . . . . . [being three- or four-membered]
5/0627 . . . . . . . . . {being five-membered}
5/0629 . . . . . . . . . {containing one hetero atom}
5/0631 . . . . . . . . . {containing two hetero atoms}
5/0633 . . . . . . . . . {containing three hetero atoms}
5/0635 . . . . . . . . . {being six-membered}
5/0637 . . . . . . . . . {containing one hetero atom}
5/0638 . . . . . . . . . {containing two hetero atoms}
5/064 . . . . . . . . . . {containing three hetero atoms}
5/0642 . . . . . . . . . . {being more than six-membered}
5/0644 . . . . . . . . .  {containing two or more hetero rings}
5/0646 . . . . . . . . . . {in the same ring system}
5/0648 . . . . . . . . . . {containing two relevant rings}
5/065 . . . . . . . . . . {containing three relevant rings}
5/0651 . . . . . . . . . . {containing four relevant rings}
5/0653 . . . . . . . . . . {containing five relevant rings}
5/0655 . . . . . . . . . . {containing six relevant rings}
5/0657 . . . . . . . . . . {containing seven relevant rings}
5/0659 . . . . . . . . . . {containing more than seven relevant rings}
5/0661 . . . . . . . . . . {in different ring systems, each system containing at least one hetero ring}
5/0662 . . . . . . . . . . {containing metal elements}

NOTE
Alcoholates, phenates or organic acid salts of alkali or alkaline earth metals are classified as the parent compounds.

5/0622 . . . . . . . . . . . . . {Dyes}
5/0666 . . . . . . . . . . . . . . {containing a methine or polymethine group}
5/0668 . . . . . . . . . . . . . . {containing only one methine or polymethine group}
5/067 . . . . . . . . . . . . . . {containing hetero rings}
5/0672 . . . . . . . . . . . . . . {containing two or more methine or polymethine groups}
5/0674 . . . . . . . . . . . . . . {containing hetero rings}
5/0675 . . . . . . . . . . . . . . {Azo dyes}
5/0677 . . . . . . . . . . . . . . {Monoazo dyes}
5/0679 . . . . . . . . . . . . . . {Disazo dyes}
5/0681 . . . . . . . . . . . . . . {containing hetero rings in the part of the molecule between the azo-groups}
5/0683 . . . . . . . . . . . . . . {containing polymethine or anthraquinone groups}
5/0685 . . . . . . . . . . . . . . {containing hetero rings in the part of the molecule between the azo-groups}
5/0687 . . . . . . . . . . . . . . {Trisazo dyes}
5/0688 . . . . . . . . . . . . . . {containing hetero rings}
5/069 . . . . . . . . . . . . . . {containing polymethine or anthraquinone groups}
5/0692 . . . . . . . . . . . . . . {containing hetero rings}
5/0694 . . . . . . . . . . . . . . {containing more than three azo groups}
5/0696 . . . . . . . . . . . . . . {Phthalocyanines}
5/0698 . . . . . . . . . . . . . . {Compounds of unspecified structure characterised by a substituent only}
5/07 . . . . . . . . . . . . . . Polymeric photoconductive materials

5/071 . . . . . . . . . . . . . . {obtained by reactions only involving carbon-to-carbon unsaturated bonds (G03G 5/078 takes precedence)}

WARNING
Group G03G 5/071 is impacted by reclassification into groups G03G 5/072, G03G 5/073, G03G 5/074 and G03G 5/0745.
All groups listed in this Warning should be considered in order to perform a complete search.

5/072 . . . . . . . {comprising pending monoamine groups}

WARNING
Group G03G 5/072 is incomplete pending reclassification of documents from groups G03G 5/071 and G03G 5/073.
Groups G03G 5/071, G03G 5/073 and G03G 5/072 should be considered in order to perform a complete search.

5/073 . . . . . . . {comprising pending carbazole groups}

WARNING
Group G03G 5/073 is impacted by reclassification into group G03G 5/072.
Groups G03G 5/073 and G03G 5/072 should be considered in order to perform a complete search.

5/0732 . . . . . . . {comprising pending alkenylarylamine}

WARNING
Group G03G 5/0732 is incomplete pending reclassification of documents from group G03G 5/071.
Groups G03G 5/071 and G03G 5/0732 should be considered in order to perform a complete search.

5/074 . . . . . . . {comprising pending diamine}

WARNING
Group G03G 5/074 is incomplete pending reclassification of documents from group G03G 5/071.
Groups G03G 5/071 and G03G 5/074 should be considered in order to perform a complete search.
5/074 . . . . [comprising pending hydrazone]

**WARNING**

Group G03G 5/0745 is incomplete pending reclassification of documents from group G03G 5/071.

Groups G03G 5/0745 and G03G 5/074 should be considered in order to perform a complete search.

5/075 . . . . (obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds (G03G 5/078 takes precedence))

5/076 . . . . [having a photoconductive moiety in the polymer backbone]

**WARNING**

Group G03G 5/076 is impacted by reclassification into groups G03G 5/0763, G03G 5/0764, G03G 5/0765, G03G 5/0766 and G03G 5/0767.

All groups listed in this Warning should be considered in order to perform a complete search.

5/0763 . . . . [comprising arylamine moiety]

**WARNING**

Group G03G 5/0763 - G03G 5/0766 are incomplete pending reclassification of documents from group G03G 5/076.

All groups listed in this Warning should be considered in order to perform a complete search.

5/0764 . . . . . . [triarylamine]
5/0765 . . . . . . [alkenylnarylamine]
5/0766 . . . . . . [benzidine]
5/0767 . . . . . . [comprising hydrazone moiety]

**WARNING**

Group G03G 5/0767 is incomplete pending reclassification of documents from group G03G 5/076.

Groups G03G 5/076 and G03G 5/0767 should be considered in order to perform a complete search.

5/078 . . . . . . (comprising silicon atoms)
5/08 . . . . characterised by the photoconductive material being inorganic
5/082 . . . . . . and not being incorporated in a bonding material, e.g. vacuum deposited
5/08207 . . . . . . [Selenium-based]
5/08214 . . . . . . [Silicon-based]
5/08221 . . . . . . [comprising one or two silicon based layers]
5/08228 . . . . . . [at least one with varying composition]

5/08235 . . . . . . [comprising three or four silicon-based layers]
5/08242 . . . . . . [at least one with varying composition]
5/0825 . . . . . . [comprising five or six silicon-based layers]
5/08257 . . . . . . [at least one with varying composition]
5/08264 . . . . . . [comprising seven or more silicon-based layers]
5/08271 . . . . . . [at least one with varying composition]
5/08278 . . . . . . [Depositing methods]
5/08285 . . . . . . [Carbon-based (in ad mixture with Si G03G 5/08214)]
5/08292 . . . . . . [Germanium-based (in ad mixture with Si G03G 5/08214)]
5/085 . . . . . . and being incorporated in an inorganic bonding material, e.g. glass-like layers
5/087 . . . . . . and being incorporated in an organic bonding material
5/09 . . . . Sensitisors or activators, e.g. dyestuffs (G03G 5/12 takes precedence)
5/10 . . Bases for charge-receiving or other layers
5/101 . . . . [Paper bases (G03G 5/102, G03G 5/104, G03G 5/105 take precedence)]
5/102 . . . . [consisting of or comprising metals]
5/104 . . . . [comprising inorganic material other than metals, e.g. salts, oxides, carbon]
5/105 . . . . [comprising electroconductive macromolecular compounds]
5/107 . . . . [the electroconductive macromolecular compounds being cationic]
5/108 . . . . [the electroconductive macromolecular compounds being anionic]
5/12 . . Recording members for multicolour processes
5/14 . . Inert intermediate or cover layers for charge-receiving layers (G03G 5/14 takes precedence)
5/142 . . [Inert intermediate layers]
5/144 . . . . [comprising inorganic material]
5/147 . . . . Cover layers
5/14704 . . . . [comprising inorganic material]
5/14708 . . . . [comprising organic material]
5/14713 . . . . [Macromolecular material]

**NOTE**

In groups G03G 5/14713 - G03G 5/14795, in the absence of an indication to the contrary, a polymer is classified in the last appropriate place.

5/14717 . . . . [obtained by reactions only involving carbon-to-carbon unsaturated bonds]
5/14721 . . . . [Polyolefinis; Polystyrenes; Waxes]
5/14726 . . . . [Halogenated polymers]
5/1473 . . . . [Polyvinylalcohol, polyallylalcohol; Derivatives thereof, e.g. polyvinylesters, polyvinylethers, polyvinylamines]
5/14734 . . . . [Polymers comprising at least one carboxyl radical, e.g. polyacrylic acid, polycarboxic acid, polymaleic acid; Derivatives thereof, e.g. their esters, salts, anhydrides, nitriles, amides]
7/00 Selection of materials for use in image-receiving members, i.e. for reversal by physical contact; Manufacture thereof (photosensitive materials for photographic purposes G03C)  
7/0006 {Cover layers for image-receiving members; Strippable coversheets}  
7/0013 {Inorganic components thereof}  
7/0002 {Organic components thereof}  
7/0026 {being macromolecular}  
7/0033 {Natural products or derivatives thereof, e.g. cellulose, proteins}  
7/004 {obtained by reactions only involving carbon-to-carbon unsaturated bonds}  
7/0046 {obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds}  
7/0053 {Intermediate layers for image-receiving members}  
7/006 {Substrates for image-receiving members; Image-receiving members comprising only one layer}  
7/0066 {Inorganic components thereof}  
7/0073 {Organic components thereof}  
7/008 {being macromolecular}  
7/0086 {Back layers for image-receiving members; Strippable backsheets}  

7/0093 {Image-receiving members, based on materials other than paper or plastic sheets, e.g. textiles, metals}  

8/00 Layers covering the final reproduction, e.g. for protecting, for writing thereon  
9/00 Developers  
9/06 the developer being electrolytic  
9/08 with toner particles  

NOTES  
1. In the subgroups of {G03G 9/0802 - G03G 9/1355}, the last place priority rule is applied, i.e. at each hierarchical level, in the absence of an indication to the contrary, classification is made in the last appropriate place.  
2. In the subgroups of G03G 9/0835 - G03G 9/0839, G03G 9/08786 - G03G 9/08797, G03G 9/0926 - G03G 9/0928 and G03G 9/10 - G03G 9/10884 the common rule is applied.}  
9/0802 {Preparation methods}  
9/0804 . {whereby the components are brought together in a liquid dispersing medium}  
9/0806 . {whereby chemical synthesis of at least one of the toner components takes place}  
9/0808 . {by dry mixing the toner components in solid or softened state}  
9/081 . {by mixing the toner components in a liquefied state; melt kneading; reactive mixing}  
9/0812 . {Pretreatment of components}  
9/0815 . {Post-treatment}  
9/0817 . {Separation; Classifying}  
9/0819 . {characterised by the dimensions of the particles}  
9/0821 . {characterised by physical parameters (magnetic parameters G03G 9/083)}  
9/0823 . {Electric parameters}  
9/0825 . {characterised by their structure; characterised by non-homogenous distribution of components (microcapsular toners G03G 9/093)}  
9/0827 . {characterised by their shape, e.g. degree of sphericity}  
9/083 . Magnetic toner particles  
9/0831 . {Chemical composition of the magnetic components}  
9/0832 . {Metals}  
9/0833 . {Oxides}  
9/0834 . {Non-magnetic inorganic compounds chemically incorporated in magnetic components}  
9/0835 . {Magnetic parameters of the magnetic components}  
9/0836 . {Other physical parameters of the magnetic components}  
9/0837 . {Structural characteristics of the magnetic components, e.g. shape, crystallographic structure}  
9/0838 . {Size of magnetic components}  
9/0839 . {Treatment of the magnetic components; Combination of the magnetic components with non-magnetic materials (G03G 9/0834 takes precedence)}
9/087 . . . Binders for toner particles
9/08702 . . . [comprising macromolecular compounds obtained by reactions only involving carbon-to-carbon unsaturated bonds]
9/08704 . . . [Polyalkenes]
9/08706 . . . [Polymers of alkenyl-aromatic compounds]
9/08708 . . . [Copolymers of styrene]
9/08711 . . . [with esters of acrylic or methacrylic acid]
9/08713 . . . [Polyvinylhalogenides]
9/08715 . . . [containing chlorine, bromine or iodine]
9/08717 . . . [Polyvinylchloride]
9/0872 . . . [containing fluorine]
9/08722 . . . [Polyvinylalcohols; Polyallylalcohols; Polyvinylethers; Polyvinylaldehydes; Polyvinylketones; Polyvinylketals]
9/08724 . . . [Polyvinylesters]
9/08726 . . . [Polymers of unsaturated acids or derivatives thereof]
9/08728 . . . [Polymers of esters]
9/08731 . . . [Polymers of nitriles]
9/08733 . . . [Polymers of unsaturated polycarboxylic acids]
9/08735 . . . [Polymers of unsaturated cyclic compounds having no unsaturated aliphatic groups in a side-chain, e.g. coumarone-indene resins]
9/08737 . . . [Polymers derived from conjugated dienes]
9/0874 . . . [Polymers comprising hetero rings in the side chains]
9/08742 . . . [comprising macromolecular compounds obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds]
9/08744 . . . [Polyacetals]
9/08746 . . . [Condensation polymers of aldehydes or ketones]
9/08748 . . . [Phenoplasts]
9/08751 . . . [Aminoplasts]
9/08753 . . . [Epoxies]
9/08755 . . . [Polysteres]
9/08757 . . . [Polycarbonates]
9/08759 . . . [Polylethers]
9/08762 . . . [Other polymers having oxygen as the only heteroatom in the main chain]
9/08764 . . . [Polyureas; Polyurethanes]
9/08766 . . . [Polyamides, e.g. polyamidesters]
9/08768 . . . [Other polymers having nitrogen in the main chain, with or without oxygen or carbon only]
9/08771 . . . [Polymers having sulfur in the main chain, with or without oxygen, nitrogen or carbon only]
9/08773 . . . [Polymers having silicon in the main chain, with or without sulfur, oxygen, nitrogen or carbon only]
9/08775 . . . [Natural macromolecular compounds or derivatives thereof]
9/08777 . . . [Cellulose or derivatives thereof]
9/08779 . . . [Natural rubber]
9/08782 . . . [Waxes]
9/08784 . . . [Macromolecular material not specially provided for in a single one of groups G03G 9/08702 - G03G 9/08775]
9/08786 . . . [Graft polymers]
G03G

9/09775 . . . . [containing atoms other than carbon, hydrogen or oxygen (G03G 9/09741 - G03G 9/09766 take precedence)]

9/09783 . . . [Organo-metallic compounds]

9/09791 . . . . [Metallic soaps of higher carboxylic acids] characterised by carrier particles

**WARNING**

Group G03G 9/10 is impacted by reclassification into group G03G 9/103.

Groups G03G 9/10 and G03G 9/103 should be considered in order to perform a complete search.

9/10 . . . . [Glass particles]

**WARNING**

Group G03G 9/103 is incomplete pending reclassification of documents from group G03G 9/10.

Groups G03G 9/10 and G03G 9/103 should be considered in order to perform a complete search.

9/103 . . . . [Glass particles]

**WARNING**

Group G03G 9/103 is incomplete pending reclassification of documents from group G03G 9/10.

Groups G03G 9/10 and G03G 9/103 should be considered in order to perform a complete search.

9/107 . . . . having magnetic components

**WARNING**

Group G03G 9/107 is impacted by reclassification into groups G03G 9/1075 - G03G 9/1084.

All groups listed in this Warning should be considered in order to perform a complete search.

9/1075 . . . . [Structural characteristics of the carrier particles, e.g. shape or crystallographic structure]

**WARNING**

Group G03G 9/1075 is incomplete pending reclassification of documents from group G03G 9/107.

Groups G03G 9/107 and G03G 9/1075 should be considered in order to perform a complete search.

9/108 . . . . [Ferrite carrier, e.g. magnetite]

**WARNING**


Groups G03G 9/107 and G03G 9/108 - G03G 9/1085 should be considered in order to perform a complete search.

9/1085 . . . . [with non-ferrous metal oxide, e.g. MgO-Fe₂O₃]

9/1087 . . . . [Specified elemental magnetic metal or alloy, e.g. alnico comprising iron, nickel, cobalt, and aluminum, or permalloy comprising iron and nickel]

**WARNING**

Group G03G 9/1087 is incomplete pending reclassification of documents from group G03G 9/107.

Groups G03G 9/107 and G03G 9/1087 should be considered in order to perform a complete search.

9/1088 . . . . [Binder-type carrier]

**WARNING**

Groups G03G 9/1088 - G03G 9/10884 are incomplete pending reclassification of documents from group G03G 9/107.

All groups listed in this Warning should be considered in order to perform a complete search.

9/10882 . . . . [Binder is obtained by reactions only involving carbon-carbon unsaturated bonds]

9/10884 . . . . [Binder is obtained other than by reactions only involving carbon-carbon unsaturated bonds]

9/113 . . . . having coatings applied thereto

9/1131 . . . . [Coating methods; Structure of coatings]

9/1132 . . . . [Macromolecular components of coatings]

9/1133 . . . . [obtained by reactions only involving carbon-to-carbon unsaturated bonds]

9/1134 . . . . [containing fluorine atoms]

9/1135 . . . . [obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds]

9/1136 . . . . [containing silicon atoms]

9/1137 . . . . [being crosslinked]

9/1138 . . . . [Non-macromolecular organic components of coatings]

9/1139 . . . . [Inorganic components of coatings]

9/12 . . . . in liquid developer mixtures

9/122 . . . . [characterised by the colouring agents]

9/125 . . . . characterised by the liquid

9/13 . . . . characterised by polymer components

9/131 . . . . [obtained by reactions only involving carbon-to-carbon unsaturated bonds]

9/132 . . . . [obtained otherwise than by reactions only involving carbon-to-carbon unsaturated bonds]

9/133 . . . . [Graft-or block polymers]

9/135 . . . . characterised by stabiliser or charge-controlling agents

9/1355 . . . . [Ionic, organic compounds]

9/16 . . . . Developers not provided for in groups G03G 9/06 - G03G 9/135, e.g. solutions, aerosols

9/18 . . . . Differentially wetting liquid developers

11/00 Selection of substances for use as fixing agents
Electrographic processes using a charge pattern
(G03G 15/00, G03G 16/00, G03G 17/00 take precedence)

NOTE
Group G03G 15/00 also deals with processes in so far as they are characterised by the use or manipulation of apparatus classifiable per se in group G03G 15/00 and therefore takes precedence.

13/00  Electrographic processes using a charge pattern
13/001  for multicoloured copies
13/002  Sensitising, i.e. laying-down a uniform charge
13/003  Exposing, i.e. imagewise exposure by optically projecting the original image on a photoconductive recording material
13/005  Imagingwise charging, i.e. laying-down a charge in the configuration of an original image using a modulated stream of charged particles, e.g. of corona ions, modulated by a photoconductive control screen bearing a charge pattern or by optically activated charging means
13/054  using X-rays, e.g. electroradiography
13/056  using internal polarisation
13/06  Developing
13/08  using a solid developer, e.g. powder developer
13/09  using magnetic brush
13/095  Removing excess solid developer
13/10  using a liquid developer, e.g. liquid suspension
13/11  Removing excess liquid developer, e.g. by heat
13/14  Transferring a pattern to a second base
13/16  of a toner pattern, e.g. a powder pattern
13/18  of a charge pattern
13/20  Fixing, e.g. by using heat
13/22  Processes involving a combination of more than one step according to groups G03G 13/02 - G03G 13/20 (G03G 13/01 takes precedence)
13/23  specially adapted for copying both sides of an original or for copying on both sides of a recording or image-receiving material
13/24  whereby at least two steps are performed simultaneously
13/26  for the production of printing plates for non-xerographic printing processes
13/28  Planographic printing plates
13/283  obtained by a process including the transfer of a toned image, i.e. indirect process
13/286  for dry lithography
13/30  Heliographic masters
13/32  Relief printing plates

13/34  Editing, i.e. producing a composite image by copying one or more original images or parts thereof

Apparatus for electrographic processes using a charge pattern
(G03G 16/00, G03G 17/00 take precedence)

15/00  Apparatus for electrographic processes using a charge pattern
15/001  for producing multicoloured copies
15/015  Details of unit
15/011  for exposing
15/0115  (and forming a half-tone image)
15/0121  (for developing)
15/0126  (using a solid developer)
15/0131  (for transferring a pattern to a second base)
15/0136  (transfer member separable from recording member or vice versa, mode switching)
15/0142  (Structure of complete machines)
15/0147  (using a single reusable electrographic recording member)
15/0152  onto which the monocolour toner images are superposed before common transfer from the recording member
15/0157  (with special treatment between monocolour image formation)
15/0163  (primary transfer to the final recording medium)
15/0168  (single rotation of recording member to produce multicoloured copy)
15/0173  (plural rotations of recording member to produce multicoloured copy, e.g. rotating set of developing units)
15/0178  (using more than one reusable electrographic recording member, e.g. one for every monocolour image)
15/0184  (at least one recording member having plural associated developing units)
15/0189  (primary transfer to an intermediate transfer belt)
15/0194  (primary transfer to the final recording medium)
15/02  for laying down a uniform charge, e.g. for sensitising; Corona discharge devices
15/0208  (by contact, friction or induction, e.g. liquid charging apparatus)
15/0216  (by bringing a charging member into contact with the member to be charged, e.g. roller, brush chargers)
15/0225  (provided with means for cleaning the charging member)
15/0233  (Structure, details of the charging member, e.g. chemical composition, surface properties)
15/0241  (by bringing charging powder particles into contact with the member to be charged, e.g. by means of a magnetic brush)
15/025  (by bringing a charging member in the vicinity with the member to be charged, e.g. proximity charging, forming microgap)
for exposing, i.e. imagewise exposure by optically projecting the original image on a photoconductive recording material

**NOTE**

The original image is obtained by direct optical projection or received from other sources, e.g. by computer modified or generated image data, by scanning, e.g. digital copiers.
Toner cartridges fulfilling a continuous function within the electrographic apparatus during the use of the supplied developer material, e.g. toner discharge on demand, storing residual toner, acting as an active closure for the developer replenishing opening.

Developer cartridges having a longitudinal rotational axis, around which at least one part is rotated when mounting or using the cartridge.

{Developer cartridges being generally horizontally mounted parallel to its longitudinal rotational axis.}

{Non-rigid containers, e.g. foldable cartridges, bags.}

{Cartridges having a box-like shape.}

{Arrangements for metering and dispensing developer from a developer cartridge into the development unit.}

{For dispensing developer from a developer cartridge not directly attached to the development unit.}

{Sealing of developer cartridges.}

{By a peelable sealing film (resealing used developer units before refilling: G03G 15/0894).}

{By a sealing film to be ruptured or cut.}

{By mechanical means, e.g. shutter, plug.}

{Arrangements for conveying and conditioning developer in the developing unit, e.g. agitating, removing impurities or humidity.}

{For agitation or stirring.}

{For conveying or circulating developer, e.g. augers.}

{In a closed loop within the sump of the developing device.}

{Reconditioning of the developer unit, i.e. reusing or recycling parts of the unit, e.g. resealing of the unit before refilling with toner.}

{Arrangements or disposition of the complete developer unit or parts thereof not provided for by groups G03G 15/08 - G03G 15/0894.}

{For preventing toner scattering during operation, e.g. seals (sealing the donor member G03G 15/0817; sealing the magnetic brush G03G 15/0942).}

{Using magnetic brush.}

{With bias voltage (G03G 15/065 takes precedence).}

{With a one-component toner.}

{Details concerning the magnetic brush roller structure, e.g. magnet configuration.}

{Relating to the shell, e.g. structure, composition.}

{Relating to bearings or driving mechanism.}

{With means for preventing toner scattering from the magnetic brush, e.g. magnetic seals.}

{Removing excess solid developer, e.g. fog preventing.}

{Using a liquid developer.}

{For wetting the recording material.}

{For differentially wetting the recording material (developers for differentially wetting G03G 9/18).}

{Preparing, mixing, transporting or dispensing developer.}

{Detection or control means for the toner concentration.}

{Condensing developer fumes (G03G 15/11 takes precedence).}

{With which the recording material is brought in contact, e.g. immersion or surface immersion development.}

{Removing excess liquid developer, e.g. by heat.}

{For transferring a pattern to a second base.}

{Of a toner pattern, e.g. a powder pattern, e.g. magnetic transfer.}

{[using at least one intermediate support (G03G 15/1625 takes precedence).}

{With means for handling the intermediate support, e.g. heating, cleaning, coating with a transfer agent.}

{Relating to the driving mechanism for the intermediate support, e.g. gears, couplings, belt tensioning.}

{Details of the intermediate support, e.g. chemical composition.}

{On a base other than paper.}

{Using the force produced by an electrostatic transfer field formed between the second base and the electrographic recording member, e.g. transfer through an air gap.}

{The field being produced by laying down an electrostatic charge behind the base or the recording member, e.g. by a corona device.}

{The second base being a continuous paper band, e.g. a CFF.}

{Arrangements for controlling the amount of charge.}

{Arrangements for supporting or transporting the second base in the transfer area, e.g. guides.}

{Comprising a rotatable holding member to which the second base is attached or attracted, e.g. screen transfer holding drum.}

{With means for conditioning the holding member, e.g. cleaning.}

{By introducing the second base in the nip formed by the recording member and at least one transfer member, e.g. in combination with bias or heat.}

{At least one of the recording member or the transfer member being rotatable during the transfer.}

{With means for controlling the bias applied in the transfer nip.}
15/168 . . . . . [with means for conditioning the transfer element, e.g. cleaning]
15/1685 . . . . . [Structure, details of the transfer member, e.g. chemical composition]
15/169 . . . . . [with means for preconditioning the toner image before the transfer (G03G 15/095 and G03G 15/11 take precedence)]
15/1695 . . . . . [with means for preconditioning the paper base before the transfer]
15/18 . . . of a charge pattern
15/20 . . . for fixing, e.g. by using heat
15/2003 . . . . . [using heat]
15/2007 . . . . . [using radiant heat, e.g. infra-red lamps, microwave heaters]
15/201 . . . . . [of high intensity and short duration, i.e. flash fusing]
15/2014 . . . . . [using contact heat]
15/2017 . . . . . [Structural details of the fixing unit in general, e.g. cooling means, heat shielding means (G03G 15/2053 takes precedence)]
15/2021 . . . . . [Plurality of separate fixing and/or cooling areas or units, two step fixing]
15/2025 . . . . . [with special means for lubricating and/or cleaning the fixing unit, e.g. applying offset preventing fluid]
15/2028 . . . . . [with means for handling the copy material in the fixing nip, e.g. introduction guides, stripping means]
15/2032 . . . . . [Retractable heating or pressure unit]
15/2035 . . . . . {for maintenance purposes, e.g. for removing a jammed sheet]
15/2039 . . . . . [with means for controlling the fixing temperature]
15/2042 . . . . . [specially for the axial heat partition]
15/2046 . . . . . [specially for the influence of heat loss, e.g. due to the contact with the copy material or other roller]
15/205 . . . . . . [specially for the mode of operation, e.g. standby, warming-up, error (G03G 15/2046 takes precedence)]
15/2053 . . . . . [Structural details of heat elements, e.g. structure of roller or belt, eddy current, induction heating]
15/2057 . . . . . [relating to the chemical composition of the heat element and layers thereof]
15/206 . . . . . . [Structural details or chemical composition of the pressure elements and layers thereof]
15/2064 . . . . . [combined with pressure]
15/2092 . . . . . [using pressure only]
15/2096 . . . . . [using a solvent]
15/22 . . . . . . involving the combination of more than one step according to groups G03G 13/02 - G03G 13/20 (G03G 15/01 takes precedence)
15/221 . . . . . . [Machines other than electrographic copiers, e.g. electrophotographic cameras, electrostatic typewriters]
15/222 . . . . . . [Machines for handling xeroradiographic images, e.g. xeroradiographic processors]
15/223 . . . . . . [Machines for handling microimages, e.g. microfilm copiers]
15/224 . . . . . . [Machines for forming tactile or three dimensional images by electrographic means, e.g. braille, 3d printing]
15/225 . . . . . . [using contact-printing]
15/226 . . . . . . [where the image is formed on a dielectric layer covering the photoconductive layer]
15/227 . . . . . . [the length of the inner surface of the photoconductive layer being greater than the length of the outer surface of the photoconductive layer]
15/228 . . . . . . [the process involving the formation of a master, e.g. photocopy-printer machines]
15/23 . . . . . . specially adapted for copying both sides of an original or for copying on both sides of a recording or image-receiving material
15/231 . . . . . . [Arrangements for copying on both sides of a recording or image-receiving material]
15/232 . . . . . . [using a single reusable electrographic recording member]
15/234 . . . . . . [by inverting and refocusing the image receiving material with an image on one face to the recording member to transfer a second image on its second face, e.g. by using a duplex tray; Details of duplex trays or inverters]
15/235 . . . . . . [the image receiving member being pre-conditioned before transferring the second image, e.g. decurled, or the second image being formed with different operating parameters, e.g. a different fixing temperature]
15/237 . . . . . . [the image receiving member being in form of a continuous web (G03G 15/235 takes precedence)]
15/238 . . . . . . [using more than one reusable electrographic recording member, e.g. single pass duplex copiers]
15/24 . . . . . . whereby at least two steps are performed simultaneously
15/26 . . . . . . in which the charge pattern is obtained by projection of the entire image, i.e. whole-frame projection (G03G 15/04 takes precedence)
15/263 . . . . . . [using a reusable recording medium in form of a band]
15/266 . . . . . . [using a reusable recording medium in form of a plate or a sheet]
15/28 . . . . . . in which projection is obtained by line scanning (G03G 15/04 takes precedence)
15/283 . . . . . . [using a reusable recording medium in form of a band]
15/286 . . . . . . [using a reusable recording medium in form of a plate or a sheet]
15/30 . . . . . . in which projection is formed on a drum
15/302 . . . . . . [with arrangements for copying different kinds of originals, e.g. sheets, books]
15/305 . . . . . . [with special means to synchronize the scanning optic to the operation of other parts of the machine, e.g. photoreceptor, copy paper]
15/307 . . . . . . [with more than one photoreceptor revolution for each copying cycle]
15/32 . . . . . . in which the charge pattern is formed dotwise, e.g. by a thermal head (G03G 15/04, G03G 15/05, G03G 15/34 take precedence)
15/321 . . . . . . [by charge transfer onto the recording material in accordance with the image]
15/323 . . . . . . [by modulating charged particles through holes or a slit]
15/325 . . . . . . [using a stylus or a multi-styli array]
G03G

15/326 . . . . . [by application of light, e.g. using a LED array]
15/328 . . . . . [using a CRT]
15/34 . . . in which the powder image is formed directly on the recording material, e.g. by using a liquid toner
15/342 . . . . . [by forming a uniform powder layer and then removing the non-image areas]
15/344 . . . . . [by selectively transferring the powder to the recording medium, e.g. by using a LED array]
15/346 . . . . . [by modulating the powder through holes or a slit]
15/348 . . . . . [by using an array or a multi-styli array]
15/36 . . . . . Editing, i.e. producing a composite image by copying one or more original images or parts thereof
15/50 . . . . . [Machine control of apparatus for electrographic processes using a charge pattern, e.g. regulating different parts of the machine, multimode copiers, microprocessor control (sequeencing control G03G 21/14)]
15/5004 . . . . [Power supply control, e.g. power-saving mode, automatic power turn-off]
15/5008 . . . . [Driving control for rotary photosensitive medium, e.g. speed control, stop position control]
15/5012 . . . . [Priority interrupt; Job recovery, e.g. alter jamming or malfunction]
15/5016 . . . . [User-machine interface; Display panels; Control console]
15/502 . . . . . [relating to the structure of the control menu, e.g. pop-up menus, help screens]
15/5025 . . . . . [by measuring the original characteristics, e.g. contrast, density]
15/5029 . . . . . [by measuring the copy material characteristics, e.g. weight, thickness]
15/5033 . . . . . [by measuring the photoconductor characteristics, e.g. temperature, or the characteristics of an image on the photoconductor]
15/5037 . . . . . [the characteristics being an electrical parameter, e.g. voltage]
15/5041 . . . . . [Detecting a toner image, e.g. density, toner coverage, using a test patch (G03G 15/553 takes precedence)]
15/5045 . . . . . [Detecting the temperature]
15/505 . . . . . [Detecting the speed, e.g. for continuous control of recording starting time]
15/5054 . . . . . [by measuring the characteristics of an intermediate image carrying member or the characteristics of an image on an intermediate image carrying member, e.g. intermediate transfer belt or drum, conveyor belt]
15/5058 . . . . . [using a test patch]
15/5062 . . . . . [by measuring the characteristics of an image on the copy material]
15/5066 . . . . . [by using information from an external support, e.g. magnetic card]
15/507 . . . . . [being interleaved with the original or directly written on the original, e.g. using a control sheet]
15/5075 . . . . . [Remote control machines, e.g. by a host]
15/5079 . . . . . [for maintenance]
15/5083 . . . . . [for scheduling]
15/5087 . . . . . [for receiving image data]
15/5091 . . . . . [for user-identification or authorisation]
15/5095 . . . . . [Matching the image with the size of the copy material, e.g. by calculating the magnification or selecting the adequate copy material size]
15/55 . . . . . [Self-diagnostics; Malfunction or lifetime display]
15/553 . . . . . [Monitoring or warning means for exhaustion or lifetime end of consumables, e.g. indication of insufficient copy sheet quantity for a job]
15/556 . . . . . . [for toner consumption, e.g. pixel counting, toner coverage detection or toner density measurement]
15/60 . . . . . . [Apparatus which relate to the handling of originals (for photographic purposes in general G03B)]
15/602 . . . . . . [for transporting]
15/605 . . . . . . [Holders for originals or exposure platens (for photographic purposes in general G03B)]
15/607 . . . . . . [for detecting size, presence or position of original]
15/65 . . . . . . [Apparatus which relate to the handling of copy material (handling sheets or webs in general B65H; for photographic purposes in general G03B)]
15/6502 . . . . . . [Supplying of sheet copy material; Cassettes therefor]
15/6505 . . . . . . [for copy sheets in ream]
15/6508 . . . . . . [Automatic supply devices interacting with the rest of the apparatus, e.g. selection of a specific cassette (matching the image with the size of the copy material G03G 15/5095)]
15/6511 . . . . . . [Feeding devices for picking up or separation of copy sheets]
15/6514 . . . . . . [Manual supply devices]
15/6517 . . . . . . [Apparatus for continuous web copy material of plain paper, e.g. supply rolls; Roll holders therefor]
15/652 . . . . . . [Feeding a copy material originating from a continuous web roll]
15/6523 . . . . . . [Cutting]
15/6526 . . . . . . [Computer form folded (CFF) continuous web, e.g. having sprocket holes or perforations]
15/6529 . . . . . . [Transporting (G03G 15/6555 takes precedence)]
15/6532 . . . . . . [Removing a copy sheet form a xerographic drum, band or plate (removing sheets from printing cylinders B65H 29/02)]
15/6535 . . . . . . [using electrostatic means, e.g. a separating corona]
15/6538 . . . . . . [Devices for collating sheet copy material, e.g. sorters, control, copies in staples form]
15/6541 . . . . . . [Binding sets of sheets, e.g. by stapling, glueing]
15/6544 . . . . . . [Details about the binding means or procedure]
15/6547 . . . . . . [Shifting sets of sheets in the discharge tray]
15/655 . . . . . . [Placing job divider sheet between set of sheets]
15/6552 . . . . . . [Means for discharging uncollated sheet copy material, e.g. discharging rollers, exit trays]
15/6555 . . . . . . [Handling of sheet copy material taking place in a specific part of the copy material feeding path]
15/6558 . . . . . . [Feeding path after the copy sheet preparation and up to the transfer point, e.g. registering; Deskewing; Correct timing of sheet feeding to the transfer point]
15/6561 . . . . . . [for sheet registration]
15/6564 . . . . . . [with correct timing of sheet feeding]
15/6567 . . . . . . [for deskewing or aligning]
Electrographic processes using deformation of thermoplastic layers (layers for surface-deformation imaging G03G 50/02); Apparatus therefor ([shaping of plastic objects with thermoplastic memory effect B29C 61/00; digital stores using thermoplastic elements G11C 11/46; television signal recording using deformable thermoplastic recording medium H04N 50/02])

Electrographic processes using patterns other than charge patterns, e.g. an electric conductivity pattern; Processes involving a migration, e.g. photoelectrophoresis, photoelectrosolography; Processes involving a selective transfer, e.g. electrophoto-adhesive processes; Apparatus essentially involving a single such process
21/043 . . . [by using an original which is not reproducible or only reproducible with a different appearance, e.g. originals with a photochromic layer or a colour background]
21/046 . . . [by discriminating a special original, e.g. a bank note]
21/06 . Eliminating residual charges from a reusable imaging member
21/08 . . . using optical radiation
21/10 . Collecting or recycling waste developer
21/105 . . . [Arrangements for conveying toner waste]
21/12 . Toner waste containers
21/14 . Electronic sequencing control
21/145 . . . [wherein control pulses are generated by the mechanical movement of parts of the machine, e.g. the photoconductor]
21/16 . . . Mechanical means for facilitating the maintenance of the apparatus, e.g. modular arrangements
21/1604 . . . [Arrangement or disposition of the entire apparatus]
21/1609 . . . [for space saving, e.g. structural arrangements]
21/1614 . . . [Means for handling of apparatus by disabled persons]
21/1619 . . . [Frame structures]
21/1623 . . . [Means to access the interior of the apparatus]
21/1628 . . . [Clamshell type (G03G 21/1638 takes precedence)]
21/1633 . . . [using doors or covers (G03G 21/1638 takes precedence)]
21/1638 . . . [directed to paper handling or jam treatment]
21/1642 . . . [for connecting the different parts of the apparatus]
21/1647 . . . [Mechanical connection means]
21/1652 . . . [Electrical connection means]
21/1657 . . . [Wireless connection means, e.g. RFID]
21/1661 . . . [means for handling parts of the apparatus in the apparatus (G03G 21/1604, G03G 21/1642 take precedence)]
21/1666 . . . [for the exposure unit]
21/1671 . . . [for the photosensitive element]
21/1676 . . . [for the developer unit]
21/168 . . . [for the transfer unit]
21/1685 . . . [for the fixing unit]
21/169 . . . [for the cleaning unit]
21/1695 . . . [for paper transport]
21/18 . . . using a processing cartridge {, whereby the process cartridge comprises at least two image processing means in a single unit}
21/1803 . . . [Arrangements or disposition of the complete process cartridge or parts thereof]
21/1807 . . . [colour]
21/181 . . . [Manufacturing or assembling, recycling, reuse, transportation, packaging or storage]
21/1814 . . . [Details of parts of process cartridge, e.g. for charging, transfer, cleaning, developing (G03G 21/1835 takes precedence)]
21/1817 . . . [having a submodular arrangement]
21/1821 . . . . . . [means for connecting the different parts of the process cartridge, e.g. attachment, positioning of parts with each other, pressure/distance regulation (G03G 21/1825 takes precedence)]
21/1825 . . . . . . [Pivotal subunit connection]
21/1828 . . . . . . [Prevention of damage or soiling, e.g. mechanical abrasion (G03G 21/1839 takes precedence)]
21/1832 . . . . . . [Shielding members, shutter, e.g. light, heat shielding, prevention of toner scattering]
21/1835 . . . . . . [the process cartridge not comprising a photosensitive member]
21/1839 . . . . . . [Means for handling the process cartridge in the apparatus body]
21/1842 . . . . . . [for guiding and mounting the process cartridge, positioning, alignment, locks (G03G 21/1864 and G03G 21/1871 take precedence)]
21/1846 . . . . . . [using a handle for carrying or pulling out of the main machine, legs of casings]
21/185 . . . . . . [the process cartridge being mounted parallel to the axis of the photosensitive member]
21/1853 . . . . . . [the process cartridge being mounted perpendicular to the axis of the photosensitive member]
21/1857 . . . . . . [for transmitting mechanical drive power to the process cartridge, drive mechanisms, gears, couplings, braking mechanisms]
21/186 . . . . . . [Axial couplings]
21/1864 . . . . . . [associated with a positioning function]
21/1867 . . . . . . [for electrically connecting the process cartridge to the apparatus, electrical connectors, power supply]
21/1871 . . . . . . [associated with a positioning function]
21/1875 . . . . . . [provided with identifying means or means for storing process- or use parameters, e.g. lifetime of the cartridge]
21/1878 . . . . . . [Electronically readable memory]
21/1882 . . . . . . [details of the communication with memory, e.g. wireless communication, protocols]
21/1885 . . . . . . [position of the memory; memory housings; electrodes]
21/1889 . . . . . . [for auto-setting of process parameters, lifetime, usage]
21/1892 . . . . . . [for presence detection, authentication]
21/1896 . . . . . . [mechanical or optical identification means, e.g. protrusions, bar codes]
21/20 . . . . . . [Humidity or temperature control [also ozone evacuation; Internal apparatus environment control]]
21/203 . . . . . . [Humidity]
21/206 . . . . . . [Conducting air through the machine, e.g. for cooling, filtering, removing gases like ozone]
2215/00033 . . . on recording member
2215/00037 . . . Toner image detection
2215/00042 . . . Optical detection
2215/00046 . . . Magnetical detection
2215/0005 . . . without production of a specific test patch
2215/00054 . . . Electrostatic image detection
2215/00059 . . . on intermediate image carrying member, e.g. transfer belt
2215/00063 . . . Colour
2215/00067 . . . on recording medium
2215/00071 . . . by measuring the phot conductor or its environmental characteristics
2215/00075 . . . the characteristic being its speed
2215/0008 . . . for continuous control of recording starting time
2215/00084 . . . the characteristic being the temperature
2215/00088 . . . by using information from an external support
2215/00092 . . . the support being an IC card
2215/00097 . . . the support being a counter
2215/00101 . . . the support being a magnetic card
2215/00105 . . . the support being a payment means, e.g. a coin
2215/00109 . . . Remote control of apparatus, e.g. by a host
2215/00113 . . . Plurality of apparatus configured in groups each with its own host
2215/00118 . . . using fuzzy logic
2215/00122 . . . using speech synthesis or voice recognition
2215/00126 . . . Multi-job machines
2215/0013 . . . for producing copies with MICR
2215/00135 . . . Handling of parts of the apparatus
2215/00139 . . . Belt
2215/00143 . . . Meandering prevention
2215/00147 . . . using tractor sprocket holes
2215/00151 . . . using edge limitations
2215/00156 . . . by controlling drive mechanism
2215/0016 . . . by mark detection, e.g. optical
2215/00164 . . . by electronic scan control
2215/00168 . . . by friction
2215/00172 . . . relative to the original handling
2215/00177 . . . for scanning
2215/00181 . . . concerning the original's state of motion
2215/00185 . . . original at rest
2215/00189 . . . original moving
2215/00194 . . . original either moving or at rest
2215/00198 . . . where one single scanning surface is used
2215/00202 . . . where separate scanning surfaces are used
2215/00206 . . . Original medium
2215/0021 . . . Plural types handled
2215/00215 . . . Mixed types handled
2215/00219 . . . Paper
2215/00223 . . . Continuous web, i.e. roll
2215/00227 . . . Fan fold, e.g. CPF, normally perforated
2215/00232 . . . Non-standard format
2215/00236 . . . Large sized, e.g. technical plans
2215/0024 . . . Small sized, e.g. postcards
2215/00244 . . . Non-standard property
2215/00248 . . . Thick
2215/00253 . . . Thin
2215/00257 . . . coloured
2215/00261 . . . Plastic
2215/00265 . . . Overhead Transparency, i.e. OHP
2215/0027 . . . Transparent film roll
2215/00274 . . . Slide
2215/00278 . . . Microfiche
2215/00282 . . . Book
2215/00286 . . . With punch holes or other non-image related artifacts, e.g. staples
2215/00291 . . . Fragile, e.g. old documents
2215/00295 . . . Valuable, e.g. cheques, passport
2215/00299 . . . Confidential, e.g. secret documents
2215/00303 . . . Control sheet
2215/00308 . . . Object for which a graphic image is not of interest, e.g. medical sample
2215/00312 . . . Other special types
2215/00316 . . . Electronic image supplied to the apparatus
2215/0032 . . . Original binding
2215/00324 . . . Document property detectors
2215/00329 . . . Document size detectors
2215/00333 . . . detecting feeding of documents
2215/00337 . . . Document set detector
2215/00341 . . . Jam handling in document feeder
2215/00345 . . . Copying machine problems
2215/0035 . . . Document related problems, e.g. double-fed sheets
2215/00354 . . . Specific document handling machines
2215/00358 . . . Plural document handling machines
2215/00362 . . . relating to the copy medium handling
2215/00367 . . . The feeding path segment where particular handling of the copy medium occurs, segments being adjacent and non-overlapping. Each segment is identified by the most downstream point in the segment, so that for instance the segment labelled "Fixing device" is referring to the path between the "Transfer device" and the "Fixing device"
2215/00371 . . . General use over the entire feeding path
2215/00375 . . . Package, e.g. a ream
2215/00379 . . . Copy medium holder
2215/00383 . . . Cassette
2215/00388 . . . rotatable
2215/00392 . . . Manual input tray
2215/00396 . . . Pick-up device
2215/004 . . . Separation device
2215/00405 . . . Registration device
2215/00409 . . . Transfer device
2215/00413 . . . Fixing device
2215/00417 . . . Post-fixing device
2215/00421 . . . Discharging tray, e.g. devices stabilising the quality of the copy medium, postfixing-treatment, inverting, sorting
2215/00426 . . . Post-treatment device adding qualities to the copy medium product (G03G 2215/00421 takes precedence)
2215/0043 . . . Refeeding path (G03G 2215/00421 takes precedence)
2215/00434 . . . Refeeding tray or cassette
2215/00438 . . . Inverter of refeeding path
2215/00443 . . . Copy medium
2215/00447 . . . Plural types handled
2215/00451 . . . Paper
2215/00455 . . . Continuous web, i.e. roll
2215/00459 . . . Fan fold, e.g. CPF, normally perforated
2215/00464 . . . Non-standard format
2215/00468 . . . Large sized, e.g. technical plans
2215/00472 . . . Small sized, e.g. postcards
<table>
<thead>
<tr>
<th>CPC Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2215/00476</td>
<td>Non-standard property</td>
</tr>
<tr>
<td>2215/00481</td>
<td>Thick</td>
</tr>
<tr>
<td>2215/00485</td>
<td>Thin</td>
</tr>
<tr>
<td>2215/00489</td>
<td>Coloured</td>
</tr>
<tr>
<td>2215/00493</td>
<td>Plastic</td>
</tr>
<tr>
<td>2215/00497</td>
<td>Overhead Transparency, i.e. OHP</td>
</tr>
<tr>
<td>2215/00502</td>
<td>Transparent film</td>
</tr>
<tr>
<td>2215/00506</td>
<td>Slide</td>
</tr>
<tr>
<td>2215/00511</td>
<td>Microfiche</td>
</tr>
<tr>
<td>2215/00514</td>
<td>Envelopes</td>
</tr>
<tr>
<td>2215/00518</td>
<td>Recording medium, e.g. photosensitive</td>
</tr>
<tr>
<td>2215/00523</td>
<td>Other special types, e.g. tabbed</td>
</tr>
<tr>
<td>2215/00527</td>
<td>Fabrics, e.g. textiles</td>
</tr>
<tr>
<td>2215/00531</td>
<td>Transported through the apparatus for non-imaging purposes, e.g. cleaning</td>
</tr>
<tr>
<td>2215/00535</td>
<td>Stable handling of copy medium</td>
</tr>
<tr>
<td>2215/00544</td>
<td>Detachable element of feed path</td>
</tr>
<tr>
<td>2215/00548</td>
<td>Jam, error detection, e.g. double feeding</td>
</tr>
<tr>
<td>2215/00552</td>
<td>Purge of recording medium at jam</td>
</tr>
<tr>
<td>2215/00556</td>
<td>Control of copy medium feeding</td>
</tr>
<tr>
<td>2215/00561</td>
<td>Aligning or deskewing</td>
</tr>
<tr>
<td>2215/00565</td>
<td>Mechanical details</td>
</tr>
<tr>
<td>2215/00569</td>
<td>Calibration, test runs, test prints</td>
</tr>
<tr>
<td>2215/00573</td>
<td>Recording medium stripping from image forming member</td>
</tr>
<tr>
<td>2215/00578</td>
<td>Composite print mode</td>
</tr>
<tr>
<td>2215/00582</td>
<td>Plural adjacent images on one side</td>
</tr>
<tr>
<td>2215/00586</td>
<td>Duplex mode</td>
</tr>
<tr>
<td>2215/0059</td>
<td>Effect of changed recording medium size, e.g. originating from heating</td>
</tr>
<tr>
<td>2215/00594</td>
<td>Varying registration in order to produce special effect, e.g. binding margin</td>
</tr>
<tr>
<td>2215/00599</td>
<td>Timing, synchronisation</td>
</tr>
<tr>
<td>2215/00603</td>
<td>Control of other part of the apparatus according to the state of copy medium</td>
</tr>
<tr>
<td>2215/00607</td>
<td>Debris handling means</td>
</tr>
<tr>
<td>2215/00611</td>
<td>Detector details, e.g. optical detector</td>
</tr>
<tr>
<td>2215/00616</td>
<td>Optical detector</td>
</tr>
<tr>
<td>2215/0062</td>
<td>Infra-red</td>
</tr>
<tr>
<td>2215/00624</td>
<td>Magnetic detector or switch, e.g. reed switch</td>
</tr>
<tr>
<td>2215/00628</td>
<td>Mechanical detector or switch</td>
</tr>
<tr>
<td>2215/00632</td>
<td>Electric detector, e.g. of voltage or current</td>
</tr>
<tr>
<td>2215/00637</td>
<td>Acoustic detector</td>
</tr>
<tr>
<td>2215/00641</td>
<td>Pneumatic detector</td>
</tr>
<tr>
<td>2215/00645</td>
<td>Speedometer</td>
</tr>
<tr>
<td>2215/00649</td>
<td>Electrodes close to the copy feeding path</td>
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<tr>
<td>2215/00654</td>
<td>Charging device</td>
</tr>
<tr>
<td>2215/00658</td>
<td>Brush (G03G 2215/00654 takes precedence)</td>
</tr>
<tr>
<td>2215/00662</td>
<td>Decurling device</td>
</tr>
<tr>
<td>2215/00666</td>
<td>Heating or drying device</td>
</tr>
<tr>
<td>2215/00667</td>
<td>Damping device</td>
</tr>
<tr>
<td>2215/00675</td>
<td>Mechanical copy medium guiding means, e.g. mechanical switch</td>
</tr>
<tr>
<td>2215/00679</td>
<td>Conveying means details, e.g. roller</td>
</tr>
<tr>
<td>2215/00683</td>
<td>Chemical properties</td>
</tr>
<tr>
<td>2215/00687</td>
<td>Handling details</td>
</tr>
<tr>
<td>2215/00691</td>
<td>Shredder</td>
</tr>
<tr>
<td>2215/00696</td>
<td>Turner acting in plane of recording medium, e.g. A4 to A4R change</td>
</tr>
<tr>
<td>2215/00707</td>
<td>Inverter not for refeeding purposes</td>
</tr>
<tr>
<td>2215/00704</td>
<td>Curl adding, bending</td>
</tr>
</tbody>
</table>
for producing multicoloured copies

Remanufacturing, i.e. reusing or recycling parts of the image forming apparatus

Details relating to power supplies

Remanufacturing, i.e. reusing or recycling parts of the image forming apparatus

Inserting seal through a gap

Insertion tool used

for producing multicoloured copies

Plural electrographic recording members

At least one recording member having plural associated developing units

Single transfer point used by plural recording members

Linearly moving set of recording members

Rotating set of recording members

Linear arrangement adjacent plural transfer points

primary transfer to an intermediate transfer belt

the linear arrangement being horizontal or slanted

horizontal medium transport path at the secondary transfer

vertical medium transport path at the secondary transfer

the linear arrangement being vertical

primary transfer to a recording medium carried by a transport belt

the linear arrangement being horizontal

the linear arrangement being vertical

the linear arrangement being slanted
caracterised by the technical problem

Vibrations and positional disturbances when one member abuts or contacts another member

Colour registration

Generation of registration marks

Uniformity control of the toner density at separate colour transfers

electrophotographic recording member

single rotation of recording member to produce multicoloured copy

plurals rotations of recording member to produce multicoloured copy

Rotating set of developing units

Linearly moving set of developing units, one at a time adjacent the recording member

Reciprocal movement of transfer member across transfer point

Multicoloured toner image formed on the recording member

Structural features of the multicolour image forming apparatus

transfer member separable from recording member

Recording medium carrying member with speed switching

Arrangements for laying down a uniform charge

by contact, friction or induction

using a magnetic brush

using a laterally vibrating brush

using contact charging means having lateral dimensions related to other apparatus means, e.g. photodrum, developing roller

by coronas

using wires

using pointed electrodes

Arrangements for exposing and producing an image

Exposure devices

Laser

Light-emitting array or panel

Light-emitting diodes, i.e. LED-array

Electroluminescent elements, i.e. EL-array

 Liquid-crystal display elements, i.e. LCD-shutter array

Standard lamp used to produce a reflection or transmission image of an original

Device not using light, e.g. ion-writer

Plurality of devices for producing the image (excluding dedicated erasing means)

Using contents of CCD array to produce the image

Editing of the image, e.g. adding or deleting (correction, i.e. changing or enhancing the image)

Changing or enhancing the image

Producing a clean non-image area, i.e. avoiding show-around effects

Parameters defining the non-image area to be cleaned

Document properties at the scanning position, e.g. position and density

Automatic detection of properties

Manual input of properties

Copy medium outline relative to the scanned document properties

Charge-erasing means for the non-image area

Light-emitting array or panel

Light-emitting diodes, i.e. LED-array

Electroluminescent elements, i.e. EL-array

Liquid-crystal display elements, i.e. LCD-shutter array

Magnification degree

Charge-erasing means for the non-image area

Light-emitting array or panel

Light-emitting diodes, i.e. LED-array

Electroluminescent elements, i.e. EL-array

Liquid-crystal display elements, i.e. LCD-shutter array

Charger

Exposure lamp used for scanning

Developing conditions changed to produce a clean non-image area

Image area information changed (default is the charge image)
Developing structures, details

- Developing device
  - Donor member
  - Metering member
  - Stirring member in developer container

- Arrangements for agitating or circulating developer material
- Presentation of developer to donor member
- Electrodes in developing area, e.g., wires, not belonging to the main donor part

- Electrodes only acting from one side of the developing area, e.g., plate electrode
- Two or more donor members
- Electrodes in donor member surface
  - Microelectrodes in donor member surface, e.g., floating
- Fixed electrodes behind moving donor member surface

- Liquid developer devices
- Toner cartridge or other attachable and detachable container for supplying developer material to replace the used material

- Having a longitudinal rotational axis, around which at least one part is rotated when mounting or using the cartridge

- Generally horizontally mounting of said toner cartridge parallel to its longitudinal rotational axis
- Toner discharging opening at one axial end
- Toner discharging opening covered by arcuate shutter
- Generally vertically mounting of said toner cartridge parallel to its longitudinal rotational axis
- Generally cylindrical container shape having two ends
- Bottle shaped container having a bottle neck for toner discharge
- Having a box like shape
- Bag-type non-rigid container
- Fulfilling a continuous function within the electrophotographic apparatus during the use of the supplied developer material, e.g., toner discharge on demand, storing residual toner, not acting as a passive closure for the developer replenishing opening

- Using a peelable sealing film
- Using a sealing member to be ruptured or cut
- Using a slidable sealing member, e.g., shutter
- Using identification means or means for storing process or use parameters

- Being an electronically readable memory

- Details of powder developing device not concerning the development directly
- Arrangements for agitating or circulating developer material
- Cleaning blade adjacent to the donor member
- Donor member rotation direction
- Upper part of donor member transports used developer back to the sump

- Lower part of donor member transports used developer back to the sump
- Agitator type
- Two or more agitators
- With wall or blade between agitators
- Belt
- Augers
- With two opposed pitches on one shaft
- With varying pitch on one shaft
- Way of functioning of agitator means
- Circulation of developer in a closed loop within the sump of the developing device
- Presentation of developer to donor member
- By upward movement of agitator member
- By downward movement of agitator member

- Stirring member in developer container
- Reciprocating

- Materials and manufacturing of the developing device
- Donor member
- Particular composition or materials
- Manufacturing
- Metering member
- Supplying member
- Housing of developing device
Details of the fixing device or process

- Transferring device, details
- Main transfer electrode
- Transfer roll
- Transfer drum
- Transfer belt
- Blade
- Plate
- Wires
- Brush
- Cleaning of transfer member
- Cleaning of transfer roll
- Cleaning of transfer drum
- Cleaning of transfer belt
- Preconditioning of copy medium before the transfer point
- Preheating the copy medium before the transfer point
- Simultaneous toner image transfer and fixing
- at the first transfer point
- at the second or higher transfer point
- Details of the fixing device or process
- Structural features of the fixing device
- Plurality of separate fixing areas
- Pressure belt
- having an end
- Heating belt
- the belt not heating the toner or medium directly, e.g., heating a heating roller
- the fixing nip having both a stationary and a rotating belt support member opposing a pressure member
- the fixing nip having a rotating belt support member opposing a pressure member
- the belt further entrained around one or more stationary belt support members, the latter not being a cooling device
- the belt further entrained around additional rotating belt support members
- the fixing nip having a stationary belt support member opposing a pressure member
- the belt further entrained around one or more rotating belt support members
- the fixing nip being formed by tensioning the belt over a surface portion of a pressure member

Processes not provided for by group G03G 2215/00, e.g. cleaning or residual charge elimination

- Cleaning of residual toner
- Plural sequential cleaning devices
- Width of cleaning device related to other parts of the apparatus, e.g. transfer belt width
- applying vibrations to the electrographic recording medium for assisting the cleaning, e.g. ultrasonic vibration
- Cleaning of foreign matter, e.g. paper powder, from imaging member
- Type of foreign matter
- Oil and other liquid matter
- Paper powder and other dry foreign matter
- Type of cleaning device
- Common container for holding cleaned foreign matter and residual toner
Separate cleaning members for foreign matter and residual toner
Cleaning device for foreign matter separate from residual toner cleaning device
Cleaning mechanism
Electrostatic
Magnetic
Liquid
Mechanical
Suction
Mechanical means for facilitating the maintenance of the apparatus, e.g. modular arrangements and complete machine concepts
for multicoloured copies
for the photosensitive element
protective arrangements for preventing damage
plural shutters for openings of process cartridge
being a belt
for the cleaning unit
re-use of cleaned toner
transporting cleaned toner into separate vessels, e.g. photoreceptors, external containers
Details concerning the cleaning process
for the developer unit
Details concerning the developing process
for the exposure unit
for the fixing unit
for the transfer unit
for conducting air through the machine, e.g. cooling
using seals, e.g. to prevent scattering of toner (light shields for the photoreceptor)
Details concerning the different parts
Locks and means for positioning or alignment
transmitting mechanical drive power
Electrical connectors
having lifetime indicators
integer lifetimes of each other
Details about used materials
Paper handling
jam treatment
Frame structures
Portable machines
using extractable subframes, e.g. on rails or hinges
using opening shell type machines, e.g. pivoting assemblies
Structural door designs
for charging
for auxiliary devices, e.g. add-on modules
Cartridge systems
Transport of supply parts, e.g. process cartridges
for cleaning or developing but not being a process cartridge
Cartridges having electronically readable memory
Process cartridge
Autosetting of process parameters
using a handle for carrying or pulling out of the main machine